

# Infrastructure & Forestland Program Update Real Assets

August 13, 2012

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# I. INVESTMENT REVIEW

## INFRASTRUCTURE PROGRAM

# Program Role & Scope<sup>(a)</sup>

- The Infrastructure Program Investment Policy was initially established in August 2008. In August 2011, the policy was revised and approved by the Board.
- Strategic Role:
  - Steady returns (low downside risk)
  - Cash flow
  - Inflation protection
  - Long-term performance exceeding CPI<sup>(b)</sup> + 400 BPS
- Primary Investment Focus:
  - High-quality assets
  - Best-in-class partners
  - U.S. investment, with strong appetite for investment in California

(a) Condensed from CalPERS Statement of Investment Policy for Real Assets, Infrastructure Program, August 15, 2011.

(b) Consumer Price Index for all Urban Consumers (CPI-U) is used as the inflation factor.

# Program Role & Scope

- The Infrastructure Program seeks to invest in public and private infrastructure including but not limited to the transportation, energy, power and water sectors.
- Asset types include:
  - Regulated utilities, or similarly regulated businesses (*e.g. Gatwick Airport*)
  - Long-term-contracted energy and power assets (*e.g. Neptune Transmission*)
  - Long-term concessions/ leases/ franchise agreements with public-sector agencies
- The Program invests across the infrastructure risk-return spectrum seeking appropriate return for risk



- Additional preferences / considerations:
  - Direct investments in the form of equity (common or preferred) or subordinated floating-rate debt
  - \$150 mm or greater, per transaction
  - Appropriate alignment with operating and financial partners

# Program Role & Scope

- Investment Screening:
  - High-quality assets
  - Best-in-class partners, and effective alignment of interests
  - High probability of successful investment execution



# Infrastructure Program<sup>(a)</sup>

- **Holdings:** The Program holdings increased from 5 investments to 6 investments with the acquisition of an interest in Neptune Regional Transmission System, LLC (NRTS).
- **Funding Status:** Funded commitments increased to \$768 mm and 75% of current commitments. The primary funding activity during the period was a direct investment in NRTS and funding of capital called for previously committed commingled funds.
- **Distributions:** There were no significant distributions during the quarter. Distributions since inception total \$158 mm.
- **Portfolio Value:** NAV<sup>(b)</sup> increased by \$258 mm to \$1,048 mm over the quarter, due to the NRTS transaction, capital called for a commingled fund and appreciation.
- **Asset Allocation:** The Strategic Target percent for the quarter remained at 1%. Actual Effective Investment percent for the quarter remained at 0.4%.
- **Performance:** The Infrastructure Program reported a Nominal Return net-of-fees of 4.5% for the quarter, outperforming the benchmark by 1.9%. The Program's 1-year, 3-year and since inception net-of-fee returns have outperformed the benchmark for these periods.
  - One extended risk fund and direct investments have been the strongest drivers of program returns. Commingled funds have had mixed performance.
- **Reported Significant Events & Exceptions:** CalPERS commitment to acquire 75% of the Class C interests in NRTS closed on February 13, 2012.
- **Post-Period Developments:** The Program made a commitment of \$250 mm for an L.P. interest plus up to \$25 mm for fees to Global Infrastructure Partners Fund II (GIP II). The investment closed on July 13, 2012. The commingled fund will focus on Transport, Water, Power and Energy assets.

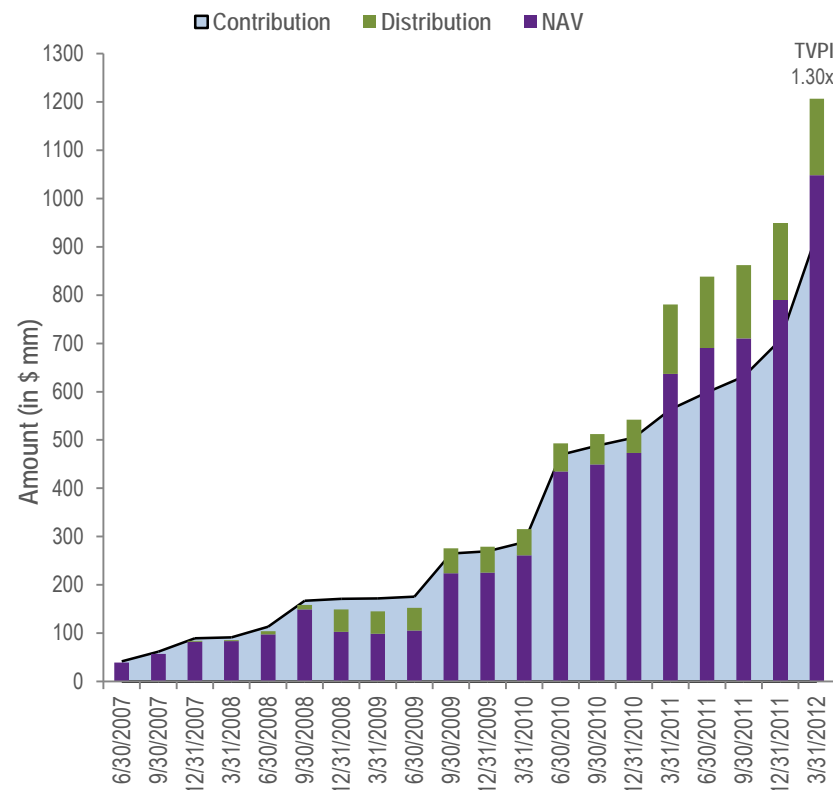
(a) Performance results for the quarter ending March 31, 2012. Data as presented in Real Assets Performance Report for quarter ending March 31, 2012. (b) NAV means "Net Asset Value." (c) L.P. means "Limited Partner."

# Financial Overview

PORTFOLIO POSITION	AS OF 03/31/2012
Commitments: To Date and Outstanding	\$1,095 mm; \$1,025 mm o/s <sup>(a)</sup>
Net Funded of Total Commitments	\$838 mm
Net Funded of Outstanding Commitments <sup>(a)</sup>	\$768 mm
Net Unfunded <sup>(b)</sup>	\$257 mm
Contributions	\$926 mm
Distributions	\$158 mm
Leverage	47%
Total Nominal Return Net of Fees <sup>(c)</sup>	8.6%
IRR Net of Fees <sup>(d)</sup>	19.1%

PORTFOLIO VALUE	QTR ENDING 03/31/2012	ACTIVITY DURING LAST 12 MONTHS
Beginning NAV	\$790 mm	\$637 mm
+ Contributions	\$219 mm	\$362 mm
- Distributions	\$15 mm	\$15 mm
+ Appreciation <sup>(e)</sup>	\$44 mm	\$103 mm
+ Income <sup>(f)</sup>	\$1 mm	(\$25 mm)
- Fees <sup>(g)</sup>	\$6 mm	\$14 mm
Ending NAV	\$1,048 mm	\$1,048 mm

TOTAL VALUE / PAID IN
TVPI = (DISTRIBUTIONS + NAV) / CONTRIBUTIONS

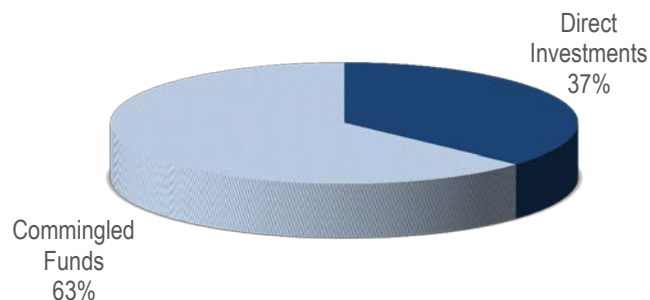


(a) Excludes non-recallable capital returned. (b) Includes recallable distributions. (c) Time Weighted Return; since inception. (d) Since inception. (e) Includes realized and unrealized. (f) Income & other credits. (g) Includes paid and accrued fees.

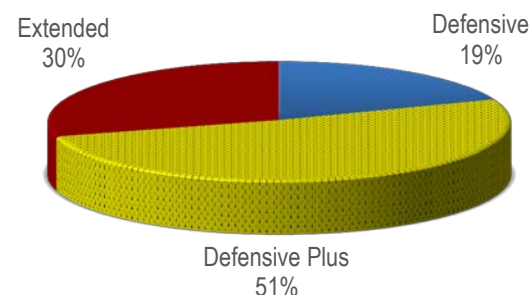


# Portfolio Characteristics: Net Asset Value

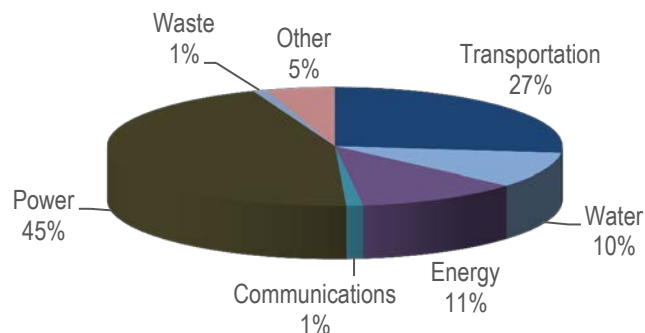
## NAV by Investment Type



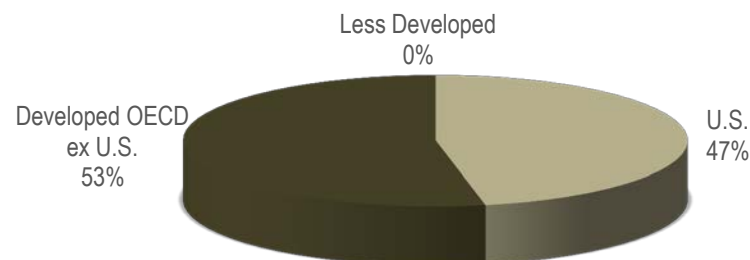
## NAV by Risk Classification



## NAV by Sector



## NAV by Geography



# Performance: Overview

## TOTAL INFRASTRUCTURE PROGRAM

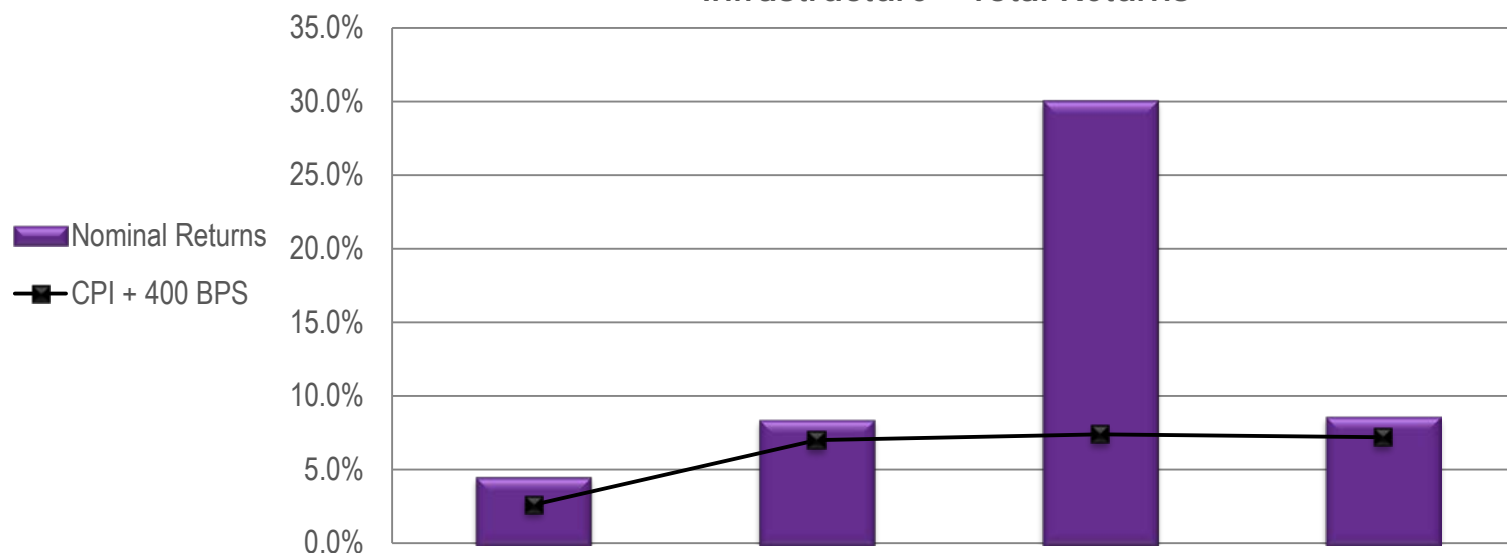
- The Program's 1<sup>st</sup> quarter (calendar year), 1-year, 3-year and since inception net of fee returns have significantly outperformed the Program's benchmark due to strong performance of one extended risk fund and direct investments.

## PROGRAM INVESTMENTS

- There are 4 externally managed funds within the Infrastructure Program representing 63% of the total portfolio NAV. Commingled Funds have outperformed the Program's benchmark, although strength in performance is driven by a single fund.
- Direct Investments represent 37% of the total Infrastructure Program. Direct Investments have outperformed the Program's benchmark for all reported periods.

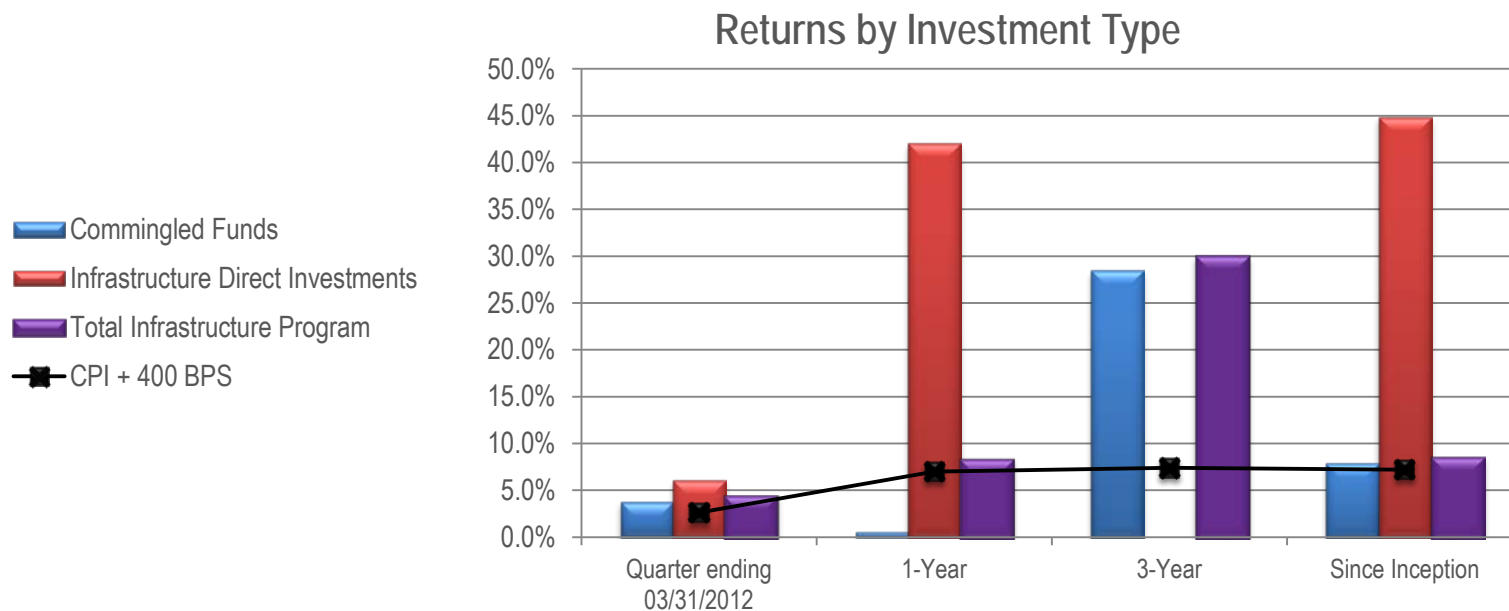
# Performance: Total Portfolio vs. Benchmark

Infrastructure – Total Returns



INFRASTRUCTURE PROGRAM	Quarter ending 03/31/2012	1-Year	3-Year	Since Inception
Nominal Returns (Net of Fees)	4.5%	8.4%	30.0%	8.6%
CPI + 400 BPS	2.6%	7.0%	7.4%	7.2%
Excess (Net) Returns	1.9%	1.4%	22.6%	1.4%

# Performance: Commingled Funds vs. Direct



Investment Type	Net Assets at Fair Market Value	% of Portfolio	Quarter ending 3/31/2012	1-Year <sup>(a)</sup>	3-Year	Since Inception <sup>(b)</sup>
Commingled Funds	\$ 658,657,723	63%	3.8%	0.5%	28.5%	7.9%
Infrastructure Direct Investments	\$ 389,487,345	37%	6.1%	42.1%	N/A	44.9%
Total Infrastructure Program	\$ 1,048,145,068	100%	4.5%	8.4%	30.0%	8.6%
CPI + 400 BPS			2.6%	7.0%	7.4%	7.2%

(a) Lower Program return reflects changes in time-weighted capital in components. (b) Inception dates range from April 2007 to June 2010.

# Policy Compliance

Policy	<ul style="list-style-type: none"> <li>— The Program is in compliance with all “Key Policy Parameters.” Until the Program NAV exceeds \$3.0 bil., Policy requires Risk and Geographic percentages to be limited on a dollar (rather than percentage) basis. The only Risk segment close to its limit was Extended, at \$309 mm versus Policy limit of \$470 mm at 03/31/12.</li> <li>— One commingled fund acquired prior to the Program’s inception exceeds the ownership limit of 25% for a commingled fund.</li> </ul>
Leverage	<ul style="list-style-type: none"> <li>— The Program complies with the Policy based on Actual Leverage of 47% versus Policy Limit Leverage of 65% of Program assets.</li> </ul>
Transactions Completed Under Delegated Authority	<ul style="list-style-type: none"> <li>— In February 2012, CalPERS acquired 75% of Class C interests in Neptune Regional Transmission System, LLC (NRTS). NRTS is a 65-mile submarine electric power transmission line that runs from Sayreville, New Jersey, to Hicksville, Long Island, New York. <ul style="list-style-type: none"> <li>➤ The investment was in compliance with policy limits.</li> </ul> </li> </ul>

# Policy Targets

CalPERS Total Fund  
03/31/2012 EOQ Market Value: \$236 Billion

Program Target per Policy as % of Total Fund	Long-Term Strategic Range/Limit per Policy as % of Total Fund	Program Target based on EOQ Total Fund (\$) <sup>(a)</sup>	Actual Investment as % of Total Fund	Actual Investment (NAV in \$ mm)	Program Commitment (in \$ mm)
2.0%	1.0 - 3.0%	\$4.7 Billion	0.4%	\$1,048	\$1,025
Investment Parameters	Long-Term Strategic Range/Limit (in %)	Long-Term Strategic Range/Limit (in \$ mm)	NAV as % of Total Program	Total Program (NAV in \$ mm)	Compliance
Risk			Refer to footnote (b) regarding compliance for early stage program		
Defensive	25 - 75	1,175 - 3,525	19	202	✓
Defensive Plus	25 - 65	1,175 - 3,055	51	537	✓
Extended	0 - 10	0 - 470	30	309	✓
Region					
United States	40 - 80	1,880 - 3,760	47	493	✓
Developed OECD ex U.S.	20 - 50	940 - 2,350	53	555	✓
Less Developed	0 - 10	0 - 470	0	0	✓
Concentration					
Equity Investments	70 - 100	3,290 - 4,700	100	1,048	✓
Debt Investments	0 - 30	0 - 1,410	0	0	✓
Public Equity Securities	0 - 10	0 - 470	0	0	✓
Other Investment Parameters	Long-Term Strategic Range/Limit as % of Total Fund		Actual as % of Total Fund		Compliance
Leverage					
Overall Portfolio LTV	65		47		✓

(a) Period ending March 31, 2012. (b) Per the new Infrastructure Policy effective as of August 15, 2011, as stated in Section V.F.2, the requirement to meet the risk and region investment parameters will be applicable for the Infrastructure Program only when the NAV exceeds \$3 billion.

# Investment Activity

- The Infrastructure Program's capital allocation request for \$2 billion for FY 2012-13 was approved by the Investment Strategy Group in June 2012.
- In connection with the California Infrastructure Outreach Effort, as of May 31, 2012, staff completed four roundtables, and 1 workshop. The sessions specifically focused on pension investment in infrastructure, transport, water, energy/power and port opportunities.
- In addition, staff has met privately with numerous state and local agencies to discuss potential projects and investment opportunities. Staff is continuing dialogue with a number of these agencies.
- The Program closed a \$250 mm commitment to an internationally-focused commingled fund in July 2012. Opportunities currently in due diligence approximate \$700 mm.

# I. INVESTMENT REVIEW

## FORESTLAND PROGRAM



# Program Role

- The Role of the Forestland Program is to:
  - provide diversification for the Total Fund; and
  - generate attractive returns through a combination of cash distributions and long-term asset appreciation and inflation protection.
- Cash yields from sales of harvested timber depend on the maturity of the forestland properties and timber prices.
- Shorter-term risks associated with economic growth are mitigated over the long term by the inherent defensive qualities including the tangible nature, biological growth and limited supply of forestland resources.

# Investment Allocation

- The Program is near its 1% policy investment target at \$2.1 billion.
- The existing portfolio is comprised of two externally-managed private investment vehicles:
  - Lincoln Timber Company (78% or \$1,655.5 mm of Total Program NAV) – domestic portfolio, executed in 2007; and
  - Sylvanus LLC (22% or \$461.5 mm of Total Program NAV) – international portfolio, executed in 2000.
- The Program's benchmark is the NCREIF<sup>(a)</sup> Timberland Index.

(a) NCREIF means "National Council of Real Estate Investment Fiduciaries."

# Characteristics: Regional Allocation vs. Benchmark

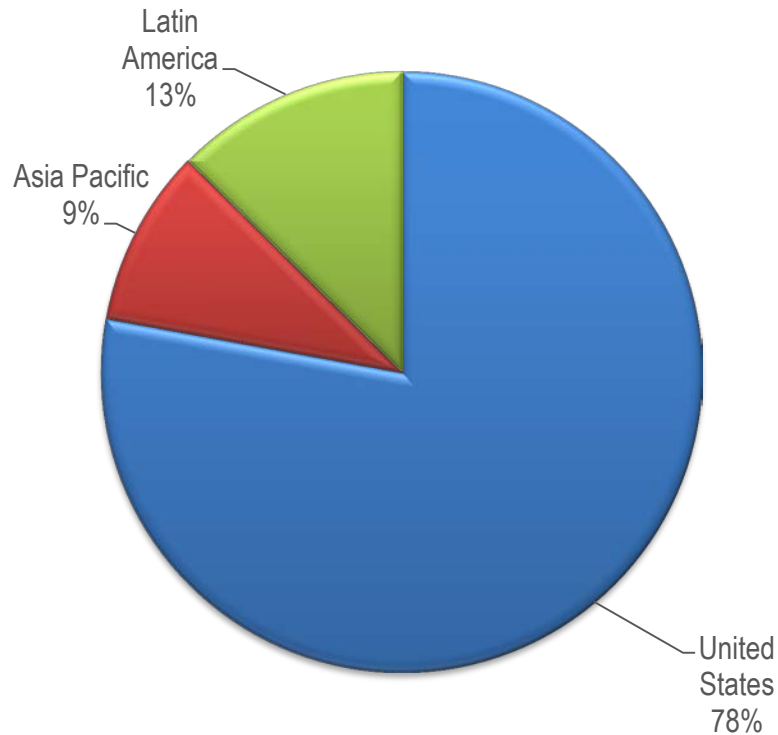
- The NCREIF Timberland Index is generally regarded as the best available timberland investment returns benchmark, although it contains only U.S. properties.
- Relative to the NCREIF Timberland Index, the Forestland portfolio is:
  - overweight in the U.S. South and international regions, and
  - underweight in other U.S. regions.

Region	% of Total CalPERS Portfolio	NCREIF Timberland	CalPERS - NCREIF Difference
U.S. South	78%	64%	14%
Asia Pacific	9%	0%	9%
Latin America	13%	0%	13%
U.S. Pacific Northwest	0%	29%	-29%
U.S. Northeast	0%	4%	-4%
Other U.S. <sup>(a)</sup>	0%	2%	-2%

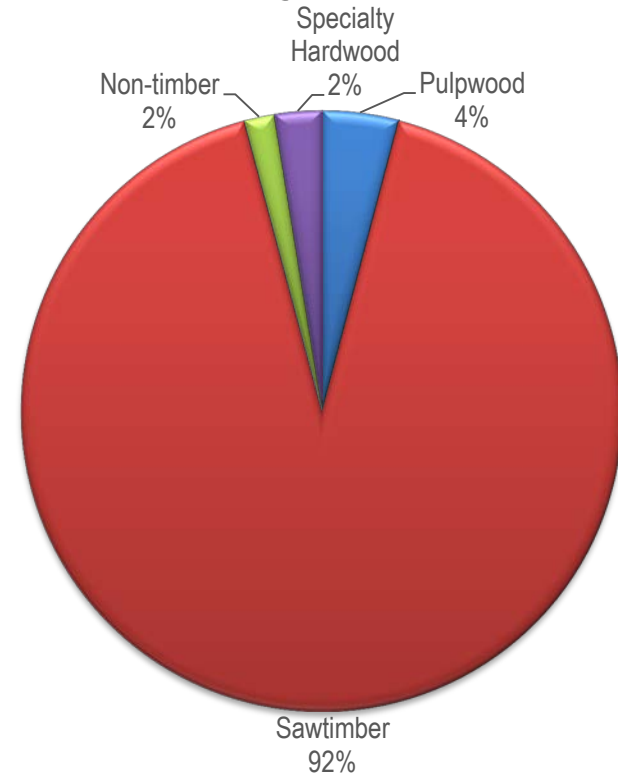
(a) Region labeled "Other" includes: all U.S. States outside of the South, Pacific Northwest and Northeast.

# Characteristics: Geography & Primary Product

## Geography



## Primary Product



# Performance: Overview

## Total Forestland Portfolio

- Total Forestland portfolio returns have underperformed relative to the Forestland Policy Benchmark across the 1-year, 3-year and since inception periods.

## Domestic Portfolio

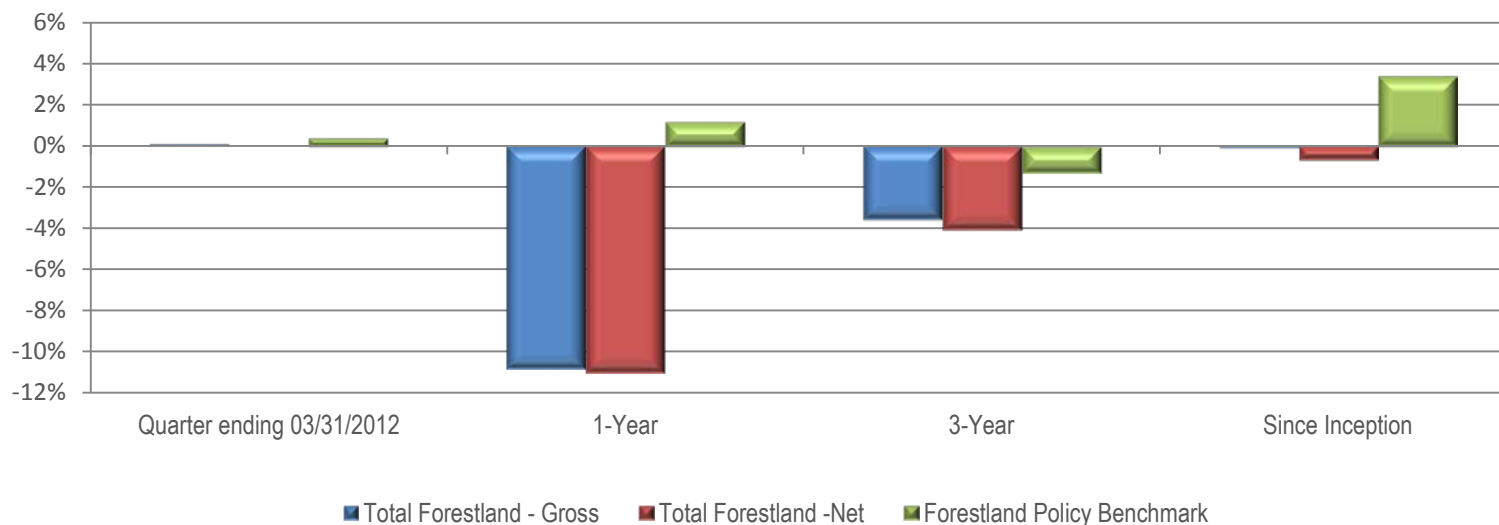
- The Domestic Portfolio, which represents 78% of the portfolio, underperformed the Benchmark for the 1-year, 3-year and since inception periods.

## International Portfolio

- The International Portfolio, which represents 22% of the portfolio, outperformed the Benchmark across the 1-year, 3-year and since inception periods.

# Performance: Portfolio Returns

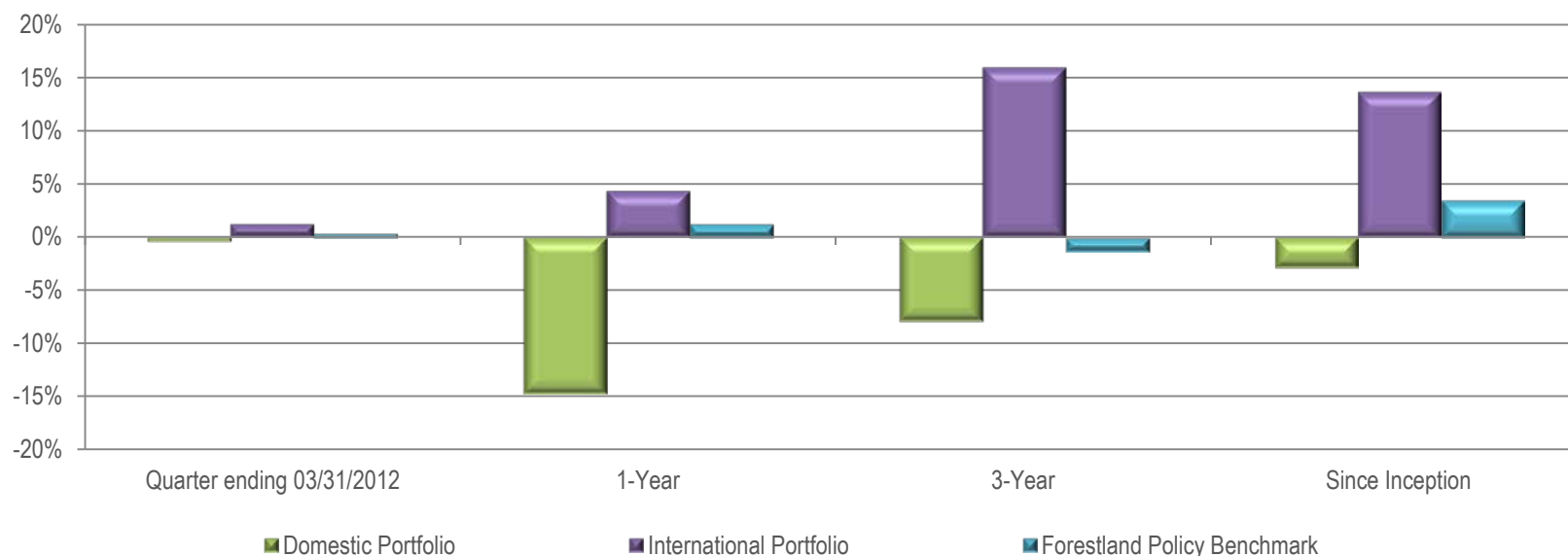
Nominal Returns	Quarter ending 03/31/2012	1-Year	3-Year	Since Inception <sup>(a)</sup>
Total Forestland – Gross	0.1%	-10.8%	-3.6%	-0.1%
Total Forestland – Net	0.0%	-11.0%	-4.1%	-0.7%
Forestland Policy Benchmark	0.4%	1.2%	-1.3%	3.4%
Excess (Gross) Returns	-0.2%	-12.0%	-2.3%	-3.5%



(a) The Forestland partnership-level and all portfolio-level time weighted returns are calculated based on an October 1, 2007 inception date. While Forestland existed prior to 10/1/07, these historical returns are included in the Real Estate portfolio (Legacy sub-portfolio).

# Performance: Net Returns by Account

Partnerships	Inception Date <sup>(b)</sup>	Net Assets at Fair Market Value <sup>(a)</sup>	% of Portfolio	Quarter ending 03/31/2012	1-Year	3-Year	Since Inception <sup>(b)</sup>
Domestic Portfolio	Oct-07	1,655,485,893	78%	-0.4%	-14.7%	-7.9%	-2.9%
International Portfolio	Oct-07	461,452,639	22%	1.3%	4.4%	16.0%	13.7%
Total Forestland Portfolio (Net)		\$2,116,938,532	100%	0.0%	-11.0%	-4.1%	-0.7%
Forestland Policy Benchmark				0.4%	1.2%	-1.3%	3.4%



(a) As of March 31, 2012. (b) The Forestland partnership-level and all portfolio-level time weighted returns are calculated based on an October 1, 2007 inception date. While Forestland existed prior to 10/1/2007, these historical returns are included in the Real Estate portfolio (Legacy sub-portfolio).

# Policy Compliance & Performance Drivers

Geography	— The portfolio maintains an overweight to the U.S. South and International geographies relative to the NCREIF Timberland Index.
International Returns	— The International Investments increase deviation vis-à-vis the NCREIF Benchmark, but provide diversification to the portfolio and have contributed to positive performance.
Primary Product	— The portfolio has a large exposure to sawtimber produced in the U.S. which supplies the U.S. housing market.
Leverage	— Though Leverage levels of 21.7% are low relative to the Forestland Policy of 40%, the leverage contributes to an underperformance to the Policy Benchmark which is unlevered.
End Market Region	— The total portfolio returns did not meet the Forestland Program Benchmark for the quarter ending March 31, 2012 and 1-year, 5-year and since inception primarily due to the portfolio's large exposure to the U.S. housing market.
Capital Allocation	— At 0.9%, the portfolio is close to its policy target of 1%.
Transactions Completed Under Delegated Authority	— None.
Program Strategy	— Forestland will engage the Meketa Investment Group to assist with the development of the Forestland Strategic Plan. The plan is expected to be completed prior to June 30, 2013.



## II. APPENDIX

# Glossary

- Net Asset Value (NAV) is the value of an entity's assets less the value of its liabilities.
- Limited Partnership (L.P.) is a legal structure used by most venture and private equity funds. The partnership is usually a fixed-life investment vehicle. Ownership interests are held by a General Partner (the management firm which has unlimited liability) and Limited Partners (the investors, who have limited liability and are not involved with the day-to-day operations). The partnership agreement specifies governance rights, fee arrangements, allocations of cash, income, and tax benefits, and other terms as agreed between the partners.
- Consumer Price Index for all Urban Consumers (CPI-U) is used as the inflation factor.
- NCREIF Timberland Index is a property level investment performance benchmark for private, institutionally-owned timberland properties. The benchmark is composed of an income return, an appreciation return and a total return and is calculated on a quarterly basis.

